

Public Lecture Series

Sponsored by the Fellows of Los Alamos National Laboratory

A History of Predicting the Future Earth, Wind, Fire, and Computers

Andrew B. White

Computer and Computational Science Division

The quest to accurately predict the course of future events is driven by the desire to make good decisions, from wearing appropriate clothes for the weather to evacuating people from danger. This talk will examine our ability (or lack thereof) to predict the future. We will concentrate on the last hundred years or so, emphasizing the period following the invention of electronic computers.

We will first examine the question of how and how well computers can predict the weather. Long-range weather prediction is generally considered impossible, yet there are some ways to beat these odds. Similarly, long-range prediction of wildfire behavior is a difficult task. We will discuss the interplay between weather and fire and the state-of-the-art in wildfire prediction.

Lastly, we will look at the fundamental changes in computers that have, at least in part, enabled the advances discussed above. We will emphasize both technological progress and the role of the marketplace. The predecessors of the next "best" computers may be in your home today.

> Los Alamos—Wednesday, 21 January 2004 at 7:30 PM **Duane W. Smith Auditorium, Los Alamos High School**

Santa Fe-Wednesday, 28 January 2004 at 7:30 PM James A. Little Theater, New Mexico School for the Deaf

Española— Wednesday, 4 February 2004 at 7:30 PM Co-sponsored by Northern New Mexico Community College.







